

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/04/03

Date Received: 08/21/03

Project: Metro Self Monitor, PO# M91571, F&BI 308232

Date Extracted: 09/03/03

Date Analyzed: 09/03/03

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M91571 308232-01	0.44	0.55	0.57	<0.10
Method Blank	<0.05	<0.05	<0.05	<0.10

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

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**QUALITY ASSURANCE RESULTS  
FROM TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Laboratory Code: 308292-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.68	0.68	0	0-20
Copper	mg/L (ppm)	0.34	0.34	0	0-20
Nickel	mg/L (ppm)	0.40	0.40	0	0-20
Zinc	mg/L (ppm)	<0.10	<0.10	nm	0-20

Laboratory Code: 308292-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	Acceptance Criteria
Chromium	mg/L (ppm)	2	0.68	90	80-120
Copper	mg/L (ppm)	2	0.34	91	80-120
Nickel	mg/L (ppm)	4	0.40	96	80-120
Zinc	mg/L (ppm)	2	<0.10	103	80-120

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	2	92	93	80-120	1
Copper	mg/L (ppm)	2	91	93	80-120	2
Nickel	mg/L (ppm)	4	96	95	80-120	1
Zinc	mg/L (ppm)	2	98	97	80-120	1

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

308232

SAMPLE CHAIN OF CUSTODY

CM 08/24/03

#11

Send Report To G. Thompson  
 Company ALASKAN Copper Works  
 Address 628 S. Harvard ST  
 City, State, ZIP Seattle WA 98134  
 Phone # 206-382-8379 Fax # 206-382-4309

SAMPLERS (signature) [Signature]  
 PROJECT NAME/NO. METRO Self monitor PO # M91571  
 REMARKS

Page # \_\_\_\_\_ of \_\_\_\_\_  
 TURNAROUND TIME  
 Standard (2 Weeks)  
 RUSH \_\_\_\_\_  
 Rush charges authorized by: \_\_\_\_\_  
 SAMPLE DISPOSAL  
 Dispose after 30 days  
 Return samples  
 Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED										Notes										
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS															
M91571	01	8/21/03	12:30pm	H <sub>2</sub> O	1																					

Friedman & Bruya, Inc.  
 3012 16th Avenue West  
 Seattle, WA 98119-2029  
 Ph. (206) 285-8282  
 Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>G. Thompson</u>	<u>ACW</u>	<u>8/21/03</u>	<u>1:00pm</u>
Received by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>F+BI</u>	<u>8/21/03</u>	<u>1:00 pm</u>
Relinquished by:				
Received by:				

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.  
Charlene Morrow, M.S.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

September 4, 2003

DUPLICATE COPY

INVOICE # 03ACU0904-3

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M91571, F&BI 308232 - Results of testing requested by Gerry Thompson for material submitted on August 21, 2003.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc by Method 6010B @ \$80 per sample	\$ 80.00
Amount Due .....	\$ 80.00

FEDERAL TAX ID # (b) (6)

FRIEDMAN & BRUYA, INC.

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Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: [fbi@isomedia.com](mailto:fbi@isomedia.com)

September 4, 2003

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

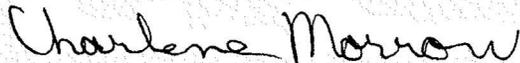
Dear Mr. Thompson:

Included are the results from the testing of material submitted on August 21, 2003 from the Metro Self Monitor, PO# M91571, F&BI 308232 project. There are 2 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Charlene Morrow  
Chemist

Enclosures  
ACU0904R.DOC